

9. MYIOBIUS SUBOCHRACEUS, sp. nov.

Supra sordide olivaceo-viridis, uropygio paulo magis ochraceo; alis nigricantibus, tectricum alarium apicibus latis et secundariorum marginibus externis pallide fulvis; cauda obscure cinerea: subtus late ochraceus, in rostro medio magis flavescens; subalaribus pallide ochraceis; rostro obscure fusco; pedibus nigris: long. tota 4·7, alæ 2·5, caudæ 2·6.

Hab. Bolivia.

Mus. S.-G.

Obs. Affinis *M. pulchro*, sed crassitie majore et colore subtus ochraceo diversus.

The specimen described is apparently a female of a third species of the group of *M. pulcher*, distinguished by its large size and the uniform ochraceous colouring below. There is just a faint appearance of a bright colour on the crown, so that the male would probably have a concealed orange crest. The bill is rather narrower and more elongated than in *M. bellus* and *M. pulcher*.

10. EMPIDONAX RIDGWAYI, sp. nov.

Supra obscure olivaceo-viridis, loris et oculorum ambitu albescentibus; alis schistaceo-nigris, tectricum alarium apicibus et secundariorum externorum marginibus externis albescentibus, ochraceo vix tinctis; cauda schistaceo-nigra; hujus reatricis externæ pogonio externo albido; infra sordide albus, in gula media clarior; ventre inferiore et crisso flavicante tinctis; subalaribus albis; rostro superiore obscure corneo, inferiore albido; pedibus nigris: long. tota 5·0, alæ 2·7, caudæ 2·3.

Hab. Colombia int.

Mus. P. L. S.

Mr. Ridgway marks this bird, which has been submitted to his examination, as "probably a new species, most like *E. trilli* in coloration, but with the outer web of the exterior rectrix white, as in *E. obscurus*." I propose to adopt this suggestion, which I quite agree with, and to call the species *Empidonax ridgwayi*, after one who has done so much good work in this group of birds.

The second, third, and fourth primaries are nearly equal and longest in this species. The first is shorter than the fifth, and very slightly longer than the sixth.

February 1, 1887.

Dr. St. George Mivart, F.R.S., Vice-President, in the Chair.

Mr. F. Day, F.Z.S., exhibited a specimen of a hybrid Pilchard, and a specimen of *Salmo purpuratus* raised in this country.

A series of specimens of Lepidopterous Insects, which had been bred in the Insect-house during the past season, was laid on the

table, and the following report upon the subject, drawn up by Mr. A. Thomson, was read :—

The following species of insects have been exhibited in the Insect-house during the past season :—

Silk-producing Bombyces and their Allies.

Indian.

<i>Attacus atlas.</i>	<i>Actias sclene.</i>
— <i>cynthia.</i>	<i>Antheræa mylitta.</i>
— <i>ricini.</i>	<i>Cricula trifenestrata.</i>
— <i>pernyi.</i>	

American.

<i>Samia cecropia.</i>	<i>Actias luna.</i>
<i>Telea polyphemus.</i>	* <i>Dirphia tarquinia.</i>
— <i>prometheus.</i>	

African.

<i>Gynanisa maia.</i>	* <i>Saturnia terpsichore.</i>
<i>Antheræa cytherea.</i>	<i>Attacus mythimna.</i>
* — <i>menippe.</i>	* <i>Actias minosæ.</i>
— <i>tyrrhea.</i>	<i>Cirina forda.</i>

Diurnal Lepidoptera.

European.

<i>Papilio podalirius.</i>	<i>Vanessa levana.</i>
— <i>machaon.</i>	* <i>Melitæa maturna.</i>
<i>Thais polyxena.</i>	<i>Limenitis sibylla.</i>
<i>Parnassius apollo.</i>	<i>Apatura iris.</i>
<i>Euchloë cardamines.</i>	* <i>Charaxes jasius.</i>
<i>Vanessa antiopa.</i>	<i>Lycæna corydon.</i>
— <i>atalanta.</i>	

African.

* <i>Papilio porthaon.</i>	* <i>Papilio nireus.</i>
* — <i>policenes.</i>	* — <i>demoleus.</i>
* — <i>colonna.</i>	* — <i>morania.</i>

American.

<i>Papilio cresphontes.</i>	<i>Papilio asterias.</i>
* — <i>ajax.</i>	* — <i>turnus.</i>

Nocturni.

<i>Smerinthus ocellatus.</i>	<i>Arctia caja.</i>
— <i>populi.</i>	— <i>hebe.</i>
<i>Sphinx ligustri.</i>	<i>Chelonia villica.</i>
— <i>convolvuli.</i>	<i>Lasiocampa quercifolia.</i>
— <i>pinastri.</i>	* — <i>pini.</i>

* Exhibited for the first time.

<i>Deilephila euphorbiæ.</i>	<i>Saturnia pyri.</i>
<i>Charocampa porcellus.</i>	— <i>carpini.</i>
— <i>elpenor.</i>	* <i>Eurymene dolobraria.</i>
— <i>nerii.</i>	<i>Tryphæna fimbria.</i>
<i>Hemaris marginalis.</i>	<i>Catocala fraxini.</i>
<i>Macroglossa fuciformis.</i>	— <i>nupta.</i>
<i>Callimorpha dominula.</i>	

Of the Silk-producing Moths and their allies, *Dirphia tarquinia* from South America, and *Actias mimosæ*, *Antheræa menippe*, *Saturnia terpsichore*, and *Attacus mythimna* from South Africa, were all exhibited for the first time. Three specimens of *D. tarquinia*, so remarkable for the difference in the size and colour of the sexes, emerged in December last; and I have the honour to exhibit a pair this evening.

The two cocoons of *Actias mimosæ*, with one cocoon of *Attacus mythimna*, and one pupa each of *A. menippe* and *S. terpsichore* were brought to England by Mrs. Monteiro from South Africa, where she had been collecting insects. The two *Actias mimosæ* emerged in due course, but I am sorry to say were cripples. I managed, however, in the setting, to get them a little into shape. From the cocoon of *Attacus mythimna* and other two pupæ, fine specimens were obtained.

During the past season I succeeded for the first time in rearing one specimen of the Great Atlas Moth (*Attacus atlas*) in the Insect-house upon ivy. It was quite by accident that I discovered that the larvæ would eat ivy; and I was much surprised, in looking over the case in which the Atlas Moths were kept, to find *one* larva feeding upon the leaves of the ivy-plant that was *growing* at the bottom. I then tried the other larvæ, which I had feeding upon *Berberis vulgaris*, with ivy-leaves, and found that they ate them freely, and seemed to prefer them to the barberry; but I regret to say that the whole of the larvæ died in the last stage, although they grew to be as large as the one reared.

The Moth that was reared emerged on the 17th October, 1886, after being in the cocoon about six weeks, and although perfect in colour, is one third less in size than those obtained from the imported cocoons.

Attacus pernyi, *A. cynthia*, and *Samia cecropia* pair readily in confinement; also *Sphinx ligustri*, *S. pinastri*, *Deilephila euphorbiæ*, and *Charocampa elpenor*; and I have reared all from the ova except *D. euphorbiæ*.

Of European Diurnal Lepidoptera, *Melitæa maturna* and *Charaxes jasius* were exhibited for the first time. The larvæ (14) of *C. jasius* were deposited in the Insect-house by Mr. J. H. Leech, F.Z.S., previous to his departure for Japan. These larvæ were then feeding upon *Arbutus unedo*; but as the supply of that food failed, I tried them with *Euonymus japonicus*, and succeeded in rearing 10 insects from the 14 larvæ upon it.

Of African Diurnal Lepidoptera, all the species named were ex-

* Exhibited for the first time.

hibited for the first time; and all the pupæ, with the exception of those of *Papilio demoleus*, were brought home by Mrs. Monteiro.

Of American Diurnal Lepidoptera, *Papilio ajax* and *Papilio turnus* were exhibited for the first time.

Amongst other insects that I obtained last year were a large number of the cocoons of, I believe, *Thyridopteryx ephemeriformis*. From these cocoons many male insects emerged and copulated with the females, which do not leave the cocoon, and the result was that some hundreds of young larvæ were produced. Of these only one survives, and I exhibit it this evening, in its curious covering. It has been reared upon young oak, raised from acorns. When the male insects first emerge from the cocoon, their wings are covered with a brownish hair, which makes them quite opaque, but on the slightest movement of the wings this at once disappears. A full description, together with figures, of this insect will be found in the First Annual Report of the U.S. States Entomologist, p. 147, by Mr. Charles V. Riley. As it is placed amongst the noxious insects by that gentleman, it is perhaps as well, in this case, that I did not succeed in rearing more than one of the larvæ.

In conclusion, I take this opportunity of thanking Mr. W. H. Edwards, of Coalburg, West Virginia, through whose kind assistance and interest I have been able to obtain many species of American insects.

The following papers were read:—

1. On the Anatomy of *Hydromys chrysogaster*. By BERTRAM C. A. WINDLE, M.A., M.D. (Dubl.), Professor of Anatomy in the Queen's College, Birmingham. (Communicated by Dr. MIVART.)

[Received December 20, 1886.]

The following notes are the result of an examination of a specimen of the above-named animal, obtained shortly after its death.

External Appearance.

Measurements (in centimetres).

Length from snout to tail	66·0
„ of tail	29·0
„ of head	7·0
Distance from snout to eye	3·3
„ „ eye to ear	2·1
Length of humerus	3·6
„ forearm	4·2
„ femur, from apex of great trochanter	5·0
„ leg	6·3
„ hand, to apex of claw of medius	3·5